

***What Is Claimed Is:***

- 1        1. A method for establishing a virtual circuit from a client to one of a  
2        plurality of servers through a network, comprising the steps of:  
3                (1) receiving a request for connection from a client, wherein said  
4                request specifies a functional group, and wherein said functional group includes  
5                a plurality of servers, each capable of servicing said client;  
6                (2) selecting a server from said functional group;  
7                (3) computing a route to said server; and  
8                (4) establishing a virtual circuit from said client to said server via said  
9                route.
  
- 1        2. The method of claim 1, wherein said step of selecting a server further  
2        comprises selecting an operational server from said functional group which has  
3        the highest available computational power.
  
- 1        3. The method of claim 1, wherein said client is a telephone switching  
2        system.
  
- 1        4. The method of claim 1, wherein said network is an ATM network.
  
- 1        5. The method of claim 1, wherein said network is a TCP/IP network.
  
- 1        6. A system for establishing a virtual circuit from a client to one of a  
2        plurality of servers through a network, comprising:  
3                an interface module coupled to receive a routing request from the  
4                network, wherein said routing request specifies a functional group and a client,  
5                and wherein said functional group includes a plurality of servers, each capable of  
6                servicing said client;

7           a server module configured to select a server from said functional group;  
8       and

9           a routing module configured to determine a route from said client to said  
10      server through the network.

1       7.     The system of claim 6, wherein said network is an ATM network.

1       8.     The system of claim 7, wherein said system further comprises:

2           a peer group leader module configured to cause the network to elect said  
3      system as a peer group leader.

1       9.     The system of claim 6, wherein said server module is configured to select  
2      an operational server from said functional group which has the highest available  
3      computational power.

1       10.    The system of claim 6, wherein said server module is further configured  
2      to maintain a list of functional groups within the network.

1       11.    The system of claim 6, wherein said client is a telephone switching  
2      system.

1       12.    The system of claim 7, wherein each of said plurality of servers responds  
2      to an ATM address for said functional group.

1       13.    The system of claim 6, wherein the network is a TCP/IP network.

1       14.    A computer program product comprising a computer useable medium  
2      having computer program logic stored therein, wherein said computer program  
3      logic comprises:

4           interface means for enabling a computer to receive a routing request from  
5        a network, wherein said routing request specifies a functional group and a client,  
6        and wherein said functional group includes a plurality of servers, each capable of  
7        servicing said client;

8           server means for enabling said computer to select a server from said  
9        functional group; and

10          routing means for enabling said computer to determine a route from said  
11        client to said server through said network.

1       15.   The computer program product of claim 14, wherein said network is an  
2        ATM network.

1       16.   The computer program product of claim 14, wherein said network is a  
2        TCP/IP network.

1       17.   The computer program product of claim 15, wherein said computer  
2        program logic further comprises:

3           a peer group leader means for enabling said computer to cause said ATM  
4        network to elect said system as a peer group leader.

1       18.   The computer program product of claim 14, wherein said server means  
2        enables said computer to select an operational server from said functional group  
3        which has the highest available computational power.

1       19.   The computer program product of claim 14, wherein said server means  
2        further enables said computer to maintain a list of functional groups within said  
3        network.

1       20. The computer program product of claim 14, wherein said client is a  
2       telephone switching system.

1       21. The computer program product of claim 15, wherein each of said plurality  
2       of servers responds to an ATM address for said functional group.

1       22. A computer, comprising:

2              a processor;

3              interface means for enabling said processor to receive a routing request  
4       from a network, wherein said routing request specifies a functional group and a  
5       client, and wherein said functional group includes a plurality of servers, each  
6       capable of servicing said client;

7              server means for enabling said processor to select a server from said  
8       functional group; and

9              routing means for enabling said processor to determine a route from said  
10      client to said server through said network.

1       23. The computer of claim 22, wherein said network is an ATM network.

1       24. The computer of claim 22, wherein said network is a TCP/IP network.

1       25. The computer of claim 23, wherein said computer further comprises:

2              a peer group leader means for enabling said processor to cause said ATM  
3       network to elect said system as a peer group leader.

1       26. The computer of claim 22, wherein said server means enables said  
2       processor to select an operational server from said functional group which has the  
3       highest available computational power.

